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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :  
Yushi HINO et al. : Attn: BOX PCT  
Serial No. NEW : Docket No. 2002-0379A  
Filed March 20, 2002 :

COIN SORTING APPARATUS AND COIN  
RECEIVING SYSTEM  
[Corresponding to PCT/JP01/08109  
Filed September 18, 2001]

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents,  
Washington, DC 20231

Sir:

Prior to examination of the above-referenced U.S. patent application please amend the application as follows:

IN THE CLAIMS

Please amend the claims as follows:

3. (Amended) The coin sorting apparatus according to claim 1, wherein the main sorting means comprises:
- a guide passage for substantially horizontally guiding coins to be sorted, one by one;
  - conveying means for conveying the coins along the guide passage; and
  - a plurality of sorting units each for sorting out coins of one of the denominations, arranged at intervals along the guide passage.

$$\frac{1}{m} \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}, \frac{1}{m} \begin{pmatrix} 1 & 0 \\ 0 & -1 \end{pmatrix}, \frac{1}{m} \begin{pmatrix} 1 & 0 \\ 0 & i \end{pmatrix}, \frac{1}{m} \begin{pmatrix} 1 & 0 \\ 0 & -i \end{pmatrix}, \frac{1}{m} \begin{pmatrix} 1 & 0 \\ 0 & e^{i\theta} \end{pmatrix}, \frac{1}{m} \begin{pmatrix} 1 & 0 \\ 0 & e^{-i\theta} \end{pmatrix}, \frac{1}{m} \begin{pmatrix} 1 & 0 \\ 0 & e^{i\phi} \end{pmatrix}, \frac{1}{m} \begin{pmatrix} 1 & 0 \\ 0 & e^{-i\phi} \end{pmatrix}$$

10. (Amended) The coin sorting apparatus according to claim 7, wherein the guide structures of the stationary member are constructed so that the coin that has run up onto the step lies in a substantially horizontal position.

11. (Amended) The coin sorting apparatus according to claim 7, wherein the guide structures of the stationary member include a step-forming plate forming the step and are movable along a width of the coin passage for positional adjustment.

12. (Amended) The coin sorting apparatus according to claim 7, wherein a foreign matter sorting means is disposed in the downstream section of the coin passage for selectively guiding a foreign matter having a thickness smaller than that of the thinnest coin so that the foreign matter is ejected outside the stationary member.

16. (Amended) The coin sorting apparatus according to claim 14, wherein the urethane rubber layer of the resilient member is formed of a thermoplastic urethane rubber.

17. (Amended) The coin sorting apparatus according to claim 14, wherein the resilient member has a porous resilient layer underlying the urethane rubber layer.

19. (Amended) The coin sorting apparatus according to claim 14, wherein a part of at least one of the radial grooves of the urethane rubber layer is configured to have a depth shallower than other parts of the same groove so as to serve as an indicator.

20. (Amended) The coin sorting apparatus according to claim 14, wherein a metal plate, detachable from the disk body, is fixed to the lower surface of the resilient member.

23. (Amended) The coin sorting apparatus according to claim 21 further comprising:  
a coin identifying means for identifying coins, disposed in a position corresponding to the upstream side of the ejecting hole of the passage member; and

a controller for changing the position of the support roller between the coin-passing position and the coin-ejecting position, depending on the result of identification by the coin identifying means.

24. (Amended) The coin sorting apparatus according to claim 21 further comprising a pressure roller adapted to press the coin through the conveyor belt against the support roller to hold the coin between the conveyor belt and the support roller.

27. (Amended) The coin deposit system according to claim 25, wherein the sorting means is adapted to sort the new coins by denomination and sort out the old coins regardless of denomination,

the new coin holding unit and the new coin storing unit have divisions respectively for holding temporarily and storing the new coins sorted by denomination, and

the old coin holding unit and the old coin storing unit are adapted to reserve temporarily and store the old coins of mixed denominations.

**Please add the following new claims:**

28. The coin sorting apparatus according to claim 2, wherein the main sorting means comprises:

a guide passage for substantially horizontally guiding coins to be sorted, one by one;  
conveying means for conveying the coins along the guide passage; and

a plurality of sorting units each for sorting out coins of one of the denominations, arranged at intervals along the guide passage.

29. The coin sorting apparatus according to claim 8, wherein a pressing means for pressing the coins toward the radial inner edge of the coin passage is disposed in the upstream section of the coin passage on the upstream side of the step.

30. The coin sorting apparatus according to claim 8, wherein the guide structures of the stationary member are constructed so that the coin that has run up onto the step lies in a substantially horizontal position.

31. The coin sorting apparatus according to claim 8, wherein the guide structures of the stationary member include a step-forming plate forming the step and are movable along a width of the coin passage for positional adjustment.

32. The coin sorting apparatus according to claim 8, wherein a foreign matter sorting means is disposed in the downstream section of the coin passage for selectively guiding a foreign matter having a thickness smaller than that of the thinnest coin so that the foreign matter is ejected outside the stationary member.

33. The coin sorting apparatus according to claim 32, wherein the foreign matter sorting means has:

a foreign matter passage formed in the stationary member and branching away from the coin passage to an outside of the stationary member; and

a gate portion formed at a junction of the coin passage and the foreign matter passage, together with the rotary disk defining a gap of such a size as allow the foreign matter to pass but not the thinnest coin.

34. The coin sorting apparatus according to claim 15, wherein the urethane rubber layer of the resilient member is formed of a thermoplastic urethane rubber.

35. The coin sorting apparatus according to claim 15, wherein the resilient member has a porous resilient layer underlying the urethane rubber layer.

36. The coin sorting apparatus according to claim 35, wherein the porous resilient layer is formed of rubber sponge.

37. The coin sorting apparatus according to claim 15, wherein a part of at least one of the radial grooves of the urethane rubber layer is configured to have a depth shallower than other parts of the same groove so as to serve as an indicator.

38. The coin sorting apparatus according to claim 15, wherein a metal plate, detachable from the disk body, is fixed to the lower surface of the resilient member.

39. The coin sorting apparatus according to claim 22 further comprising:  
a coin identifying means for identifying coins, disposed in a position corresponding to the upstream side of the ejecting hole of the passage member; and  
a controller for changing the position of the support roller between the coin-passing position and the coin-ejecting position, depending on the result of identification by the coin identifying means.

40. The coin sorting apparatus according to claim 22 further comprising a pressure roller adapted to press the coin through the conveyor belt against the support roller to hold the coin between the conveyor belt and the support roller.

41. The coin deposit system according to claim 26, wherein the sorting means is adapted to sort the new coins by denomination and sort out the old coins regardless of denomination,

the new coin holding unit and the new coin storing unit have divisions respectively for holding temporarily and storing the new coins sorted by denomination, and

the old coin holding unit and the old coin storing unit are adapted to reserve temporarily and store the old coins of mixed denominations.

